

## **Attachment F**

### **Scope A- Lower Manhattan Cleaning Procedures**

# **World Trade Center Indoor Dust Cleaning Program**

## **Scope of Work A**

Application: These procedures apply to the cleaning of minimal dust accumulations (light coating). If a visual inspection indicates the presence of significant accumulations of dust and/or debris from the collapse of the WTC in residences or common spaces (including elevator shafts), Scope B procedures shall be applied (refer to Scope of Work B). Residents may be present during Scope A cleaning procedures.

### **1. Cleaning of Common Spaces**

Common spaces including hallways, stairways and the interior of elevator cars shall be cleaned, if requested by the building owner. The Monitoring Contractor in consultation with EPA, or EPA's designee will evaluate and determine if other common areas including utility rooms, laundry rooms, compactor rooms, elevator shafts require cleaning. Work will begin from the entrance and continue through all common spaces in an orderly fashion. A detailed description of the minimum cleaning requirements for common space is as follows:

- a. Vacuuming will begin with the ceiling, continue down the walls and include floors. A vacuum equipped with a motorized agitator bar will be used to vacuum carpets.
- b. Impermeable walls and floors will be wet wiped, after consultation with and approval by owner. Wet wiping will not be conducted if it is determined that it would cause damage to the surface.
- c. Carpets will be cleaned with a water extraction cleaner after consultation with and approval by owner. After cleaning, red rosin construction paper will be applied to high traffic areas to protect carpets from soiling. Water extraction cleaning will not be conducted if it would cause damage to the carpet.
- d. Surfaces that are not cleaned by wet methods (wet wiping and water extraction cleaner) will be vacuumed two times.

### **2. Cleaning of HVAC Systems**

HVAC systems that are determined by the Monitoring Contractor to be impacted by dust or debris from the collapse of the World Trade Center will be cleaned in accordance with the site-specific scope of work prepared by the Monitoring Contractor and approved by EPA. HVAC systems cleaning, if warranted, shall be completed prior to the initiation of the cleaning of common space or residences within an affected building. In the event that the HVAC system for an entire building requires cleaning, a separate, site specific contract will be awarded by DEP for this work. If only a portion of an HVAC system requires cleaning, then the cleaning contractor will conduct the cleaning utilizing specialized labor trained and experienced in duct cleaning.

HVAC cleaning shall be conducted in accordance with National Air Duct Cleaners

Association (NADCA) General Specification for the Cleaning of Commercial Heating, Ventilating and Air Conditioning Systems and the NADCA Assessment, Cleaning and Restoration Standard (ACR 2002). Verification of the effectiveness of HVAC system cleaning will be determined by the Monitoring Contractor. If dust or other contaminants are evident through visual inspection, those portions of the system where dust or other contaminants are present shall be re-cleaned and subjected to re-inspection for cleanliness. If the cleaning contractor is not a member of the NADCA, a subcontractor that is a member may perform this portion of the work.

3. Cleaning of Residential Spaces

Residences will be cleaned using HEPA vacuums, water extraction cleaners and wet wiping as described below. Surfaces to be cleaned include but are not limited to walls, floors, ceilings, ledges, trims, furnishings, appliances, equipment, etc. Encapsulating agents shall not be applied. Dry sweeping is prohibited. The cleaning contractor will not clean inside of drawers, cabinets, breakfronts and similar enclosed storage or display pieces, however, the exterior of these pieces will be cleaned. Cleaning of clothing and accessories (handbags, shoes etc.) shall be the responsibility of the occupant. A detailed description of the minimum cleaning requirements is as follows:

- a. Terraces, balconies, exterior window sills, window wells and window guards that are accessible from the interior of the dwelling, shall be cleaned.
- b. Interior windows, screens, window sills and window guards will be cleaned
- c. Vacuuming will begin with the ceiling, continue down the walls and include the floor. A vacuum equipped with a motorized agitator bar will be used to vacuum carpets.
- d. Impermeable walls and floors will be wet wiped, after consultation with and approval by owner/resident. Wet wiping will not be conducted if it is determined that it would cause damage to the surface.
- e. Carpets will be cleaned with a water extraction cleaner after consultation with and approval by owner/resident. After cleaning, red rosin construction paper will be applied to high traffic areas to protect carpets from soiling. Water extraction cleaning will not be conducted if it would cause damage to the carpet.
- f. Fabric covered furniture will be vacuumed and then cleaned with a water extractions cleaner after consultation with and if approved by owner/resident. Water extraction cleaning will not be conducted if it would cause damage to the furniture.
- g. All surfaces including but not limited to floors, walls, curtains, fabric window treatments, upholstery and other materials that are not cleaned by wet methods (wet wiping and water extraction cleaning) will be HEPA vacuumed two times. Fabric covered furniture that is not cleaned by wet methods will be vacuumed using an appropriate brush attachment.
- h. Intake/discharge registers of HVAC systems (if present) will be removed/cleaned. The first foot of duct work will also be vacuumed; then the register will be reinstalled and covered with a layer of 6 mil polyethylene sheeting.
- i. Window and room air conditioners will be vacuumed, wet wiped and removed

from their housing to allow access to internal portions of the air conditioner. The internal portions of the air conditioner and housing will then be vacuumed. Filters will be vacuumed and reinstalled. Air conditioners will be reassembled and reinstalled after cleaning.

- j. Paperwork and books will be HEPA-vacuumed.
  - k. Electrical outlets will be vacuumed.
  - l. Appliances such as refrigerators and stoves will be cleaned and moved. The floor footprint of the appliances will be cleaned and the appliance will be reinstalled in their original positions.
  - m. Refrigerator cooling tubes will be brushed and vacuumed.
  - n. The first foot of all exhaust duct work (including stove, dryer and bathroom vents) where accessible, will be vacuumed. Exhaust fans will be vacuumed and wiped
  - o. Unobstructed closet floors will be vacuumed.
  - p. Solid objects (electrical equipment, exercise equipment, etc.) will be wet wiped, moved to allow cleaning of the underlying surface and will be returned to their original location.
  - q. Dishwasher toe plates will be removed and the floor beneath the appliance will be cleaned.
  - r. Baseboard heaters will be cleaned. Protective covers on finned radiant heaters and baseboard heaters will be removed to expose heat elements. Fins are to be brushed and vacuumed to remove dust.
  - s. All cleaning equipment will be vacuumed and/or wet wiped after completion of the cleaning and before removal from the work area.
- 4. HEPA air filtration devices (AFDs) will run continuously during all cleaning activities, as appropriate given site conditions. AFDs shall be installed and operated to provide a minimum of one air change every 15 minutes. Make up air should be derived from a non-impacted source (i.e. open window or common spaces previously cleaned).
  - 5. A minimum of one asbestos supervisor shall be present in each building during work.
  - 6. A Cleaning Checklist (to be developed by EPA) will be completed by the cleaning contractor as tasks are completed to document the progress of the cleaning.
  - 7. The cleaning contractor shall notify the monitoring contractor immediately upon completion of the cleaning. The Monitoring Contractor will conduct a thorough visual inspection to verify the absence of visible dust accumulations. If dust is observed the cleaning contractor will re-clean as necessary at no additional cost.
  - 8. Air sampling shall be performed by the Monitoring Contractor after the area is free of dust accumulations as determined by the Monitoring Contractor. The residence will be re-cleaned and re-tested if the clean-up criteria of 0.0009 fibers/cc (PCME measured by TEM) is not achieved or if determined necessary by EPA. This clean-up criterion may be reevaluated and revised, if determined necessary based on field conditions and analytical

limitations.

9. Any damage or loss that occurs during cleaning is the responsibility of the cleaning contractor. The cleaning contractor is not responsible for damage or loss caused by the acts of third parties not involved in the cleaning activities.
10. Owner/residents may identify and tag certain furnishings (e.g. carpets and fabric covered furniture) for disposal rather than cleaning. Disposal of residents' personal property shall not occur without prior written authorization by the owner.
11. Disposal of all wastes generated during the cleaning shall be the responsibility of the contractor. All waste generated shall be treated as asbestos-containing material (ACM). Transportation and disposal of generated waste shall be in compliance with all applicable rules and regulations.
12. If mold or peeling, flaking or chalking paint is observed in the work area, the cleaning contractor shall immediately contact the Monitoring Contractor.
13. If in-place materials suspected to contain asbestos are observed the Cleaning Contractor shall immediately notify the Monitoring Contractor. The Monitoring Contractor will evaluate the condition of the material to identify damaged, deterioration, delamination, etc. The Cleaning Contractor shall wrap suspect ACM that is in good or excellent condition with 6-mil polyethylene sheeting and seal airtight with duct tape or equivalent method prior to cleaning or air monitoring.
14. In the event that damaged, deteriorated, delaminated, etc. suspected ACM is observed, the Cleaning Contractor will notify the Monitoring Contractor. Cleaning or air monitoring will not proceed in areas where such suspected ACM is observed until instructed otherwise.